



**SPECIAL PROVISIONS
FOR
ALUMINUM STOP LOGS**

**Woodbury County
IM-NHS-029-6(257)147--03-97**

**Effective Date
March 18, 2014**

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

120138.01 DESCRIPTION.

A. Summary.

Stop logs, guide frames, and lifting device for the siphon structures and lift station areas.

B. References.

1. ASTM A240 - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
2. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
3. ASTM B211 - Standard Specification for Aluminum and Aluminum-Alloy Bar, Rod and Wire.
4. ASTM B308 - Standard Specification for Aluminum and Aluminum-Alloy 6061-T6 Standard Structural Profiles.
5. ASTM D2000 - Standard Classification System for Rubber Products in Automotive Applications.
6. ASTM D4020 - Standard Specification for Ultra-High-Molecular-Weight Polyethylene Molding and Extrusion Materials.

120138.02 MATERIALS.

A. Manufacturers.

1. Golden Harvest

2. Hydro Gate Corporation
3. Whipps.
4. Engineer approved equivalent.

B. General.

Stop logs and guide frames shall be by one manufacturer who regularly designs and manufacturers stop logs and sluice gates for similar installations.

C. Stop Logs.

1. Aluminum construction with aluminum plate reinforcing to limit deflection to 1/1000 of the span of the log under the design head conditions.
 - a. Aluminum 6061-T6, ASTM B209 and B211.
 - b. Head Condition: 5 feet 4 inches of 70 psf liquid sludge.
2. Seals: Extruded neoprene seals on inverts.
 - a. Seals shall be held in place by a bolted retainer bar and shall be field replaceable.
 - b. Neoprene rubber, ASTM D2000.
 - c. Retainer: Aluminum 6061-T6, ASTM B209 and B211.
3. Lifting Lugs: Provide on each log to facilitate removal.
4. Logs shall be removable as a single aggregate unit.
5. Logs shall link as a single unit and shall securely interlock together.
6. Hardware: Stainless steel Type 304 and 316.
7. Seats: Ultra high molecular weight polyethylene, ASTM D4020.
8. Leakage: Shall not exceed 0.4 GPM per foot of seating perimeter.

D. Guide Frames.

1. Stainless Steel Type 304, ASTM A240.
2. Bottom sill shall consist of stainless steel section similar in size to vertical guide sections.
3. Sill shall be furnished with additional members and adjusting studs to allow for leveling prior to final grout placement.
4. Provide vent holes in sill member to allow for air escapement.
5. Neoprene seals shall be provided in the frame. Seals shall be adjustable and field replaceable.
6. Frames shall be designed to fit into the structures as indicated on the drawings and shall provide a clear opening as indicated on the drawings.

E. Lifter.

1. Designed to install and remove the stop logs either individually or together as an aggregate unit.
2. Fabricated from aluminum and stainless steel and designed to travel in the stop log guides.
3. Aluminum 6061-T6, ASTM B308, Stainless steel.
4. Provide spring-loaded forks, a yoke with tongues that fit into guide grooves, and a lifting post with reinforced eye.

F. Identification.

Each major component of equipment shall have the manufacturer's name, address, and catalog number on a nameplate securely affixed to the equipment.

120138.03 CONSTRUCTION.

A. Submittals.

1. Shop drawings showing arrangement, dimensions, and materials.
2. Manufacturer's Certification: Include documentation verifying design meets the specified requirements. Certification shall be signed and sealed by a professional structural engineer employed by manufacturer and registered in the State of manufacturer.
3. Operation and maintenance manuals.

B. Delivery, Storage, and Handling.

Stop log equipment shall be adequately protected during transportation, storage at the job site, and installation and construction. Damaged units shall be replaced.

C. Coordination.

1. Coordinate work between the suppliers of the equipment to be used with or connected to the storage area to ensure that all required provisions for mounting the accessories are included.
2. Contractor is responsible for ensuring that stop logs and frames are correct size for the opening constructed.

D. Testing Equipment and Procedures.

In accordance with manufacturer's instructions.

120138.04 METHOD OF MEASUREMENT.

Aluminum stop logs will not be measured for payment.

120138.05 BASIS OF PAYMENT.

Siphon Structure Stop Logs incidental to Siphon Structures and will not be paid for separately. Lift Station Stop Logs incidental to Connection to Existing Lift Station and will not be paid for separately.